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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,738	02/04/2004	Ken A. Nishimura	10030616-1	4822
57299	7590	01/23/2008	EXAMINER MOON, SEOKYUN	
Kathy Manke Avago Technologies Limited 4380 Ziegler Road Fort Collins, CO 80525			ART UNIT 2629	PAPER NUMBER
			NOTIFICATION DATE 01/23/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

avagoip@system.foundationip.com  
kathy.manke@avagotech.com  
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**Advisory Action  
Before the Filing of an Appeal Brief**

**Application No.**

10/771,738

**Applicant(s)**

NISHIMURA ET AL.

**Examiner**

Seokyun Moon

**Art Unit**

2629

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED ON 12/18/2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1.  The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a)  The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
 b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2.  The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3.  The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
 (a)  They raise new issues that would require further consideration and/or search (see NOTE below);  
 (b)  They raise the issue of new matter (see NOTE below);  
 (c)  They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
 (d)  They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4.  The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
 5.  Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
 6.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
 7.  For purposes of appeal, the proposed amendment(s): a)  will not be entered, or b)  will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: \_\_\_\_\_.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8.  The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
 9.  The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10.  The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11.  The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
Please see the attachment.  
 12.  Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_  
 13.  Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Arguments*

The Applicant's arguments filed on December 18, 2007 have been fully considered.

Regarding the rejections of claims 1 and 17, the Applicant [Applicant's Remark: pg 10 lines 1-10] argued that no where in the prior art of record (US 6,064,358, herein after "Kitajima") teaches or suggests a processed-limited voltage to be used with respect to drive signals since the term, "*process-limited*" in claims 1 and 17 refers to modern integrated circuit process not a driving process. However, the Examiner respectfully submits that the Applicant have failed to specify the type of the process in the claims. The claims merely discloses, "*a process-limited maximum*" and, as clearly explained in the previous Office Action, the Examiner interpreted " $V_{DH}$ " of Kitajima as a limited maximum value of the signal " $V_D$ " during a driving process of a liquid crystal display. Accordingly, the Examiner respectfully submits that the Applicant's arguments regarding claims 1 and 17 are not persuasive.

Regarding the rejections of claims 2, 3, and 18, the Applicant [Applicant's Remark: pg 11, the last paragraph and pg 12, the last paragraph] stated that the Applicant disagrees with the Examiner's inherency statement since the liquid crystals included in the pixels of the display may be controlled by the voltage difference and retain control of the transmission of the backlight at the right timing. Examiner respectfully disagrees. As stated in col. 17 lines 62-64 of Kitajima, the voltage difference, " $V_{DH}-V_{CL}$ ", is the desired voltage for liquid crystals of the pixels. In other words, in the display of Kitajima, the voltage difference, " $V_{DH}-V_{CL}$ ", is the voltage controlling the liquid crystals of the pixels and thus controlling the light transmission of the backlight of the display. Thus, the voltage difference, " $V_{DH}-V_{CL}$ ", is a threshold voltage for changing the arrangement of the liquid crystals of the pixels, as desired. If either one of the voltage differences, " $V_{CH}-V_{CL}$ " and " $V_{DH}-V_{CH}$ ", is greater than the threshold voltage, the threshold voltage, " $V_{DH}-V_{CL}$ ", would not be a desired voltage for controlling the liquid crystals of the pixels since

the liquid crystals of the pixels would be controlled by the voltage differences, " $V_{CH}-V_{CL}$ " and " $V_{DH}-V_{CH}$ ". Furthermore, since fig. 26(d) shows the voltage differences, " $V_{CH}-V_{CL}$ " and " $V_{DH}-V_{CH}$ ", are lower than the voltage difference, " $V_{DH}-V_{CL}$ ", Kitajima teaches the claim limitation.

Regarding claims 13 and 16, the Applicant [Applicant's Remark: pg 13, 5th paragraph] pointed out, "*the mere fact that a certain thing may result from a given set of circumstances is not sufficient. The certain thing must result from a given set of circumstances. In this case, the fact that other factors might lower the amplitude of the breakdown voltage is not insufficient to read on claims 13 and 16*". Examiner respectfully disagrees. Examiner respectfully submits that the Examiner's rejection is not based on the fact that other factors might lower the amplitude of the breakdown voltage, but is based on the fact that the other factors will not increase the breakdown voltage.

Regarding the rejections of claims 12, 23, and 24, in response to the Applicant's argument that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). For the combination of Kitajima and Kawaguchi (US 6,677,925), the Examiner merely applies the idea of Kawaguchi, using the pixel drive signal to generate the common drive signal by converting the high and the low voltages of the pixel drive signal to the high and the low voltages of the common drive signal, to the display of Kitajima. The advantage of using Kawaguchi's above driving method is to simplify the structure of the voltage generating circuitry of the common drive circuit of Kitajima.

*Conclusion*

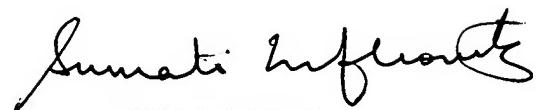
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seokyun Moon whose telephone number is (571) 272-5552. The examiner can normally be reached on Mon - Fri (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

January 09, 2008

- s.m.



SUMATI LEFKOWITZ  
SUPERVISORY PATENT EXAMINER